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**Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554 RECEIVED**

MAY - 2 2001

In the Matter of:

Amendment of Section 73.622(b),
Table of Allotments,
Digital Television Broadcast Stations
(Albuquerque, New Mexico)

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)
)

**FEDERAL COMMUNICATIONS COMMISSION
OFFICE OF THE SECRETARY**

MM Docket No. 01-_____
RM-_____

To: Chief, Video Services Division

PETITION FOR RULEMAKING

ACME Television Licenses of New Mexico, LLC ("ACME"), by its attorneys and pursuant to Section 73.623 of the Commission's rules, hereby requests that the Commission institute a rulemaking proceeding for the purpose of amending the DTV Table of Allotments to change the DTV channel allotment for station KASY-DT, Albuquerque, New Mexico, from DTV Channel 51 to DTV Channel 45. In support, ACME shows as follows:

1. ACME is the licensee of television station, KASY-TV, Albuquerque, New Mexico, which currently operates on NTSC Channel 50. The Commission specified DTV Channel 51 for use by KASY-TV as its paired DTV allotment.¹ The Commission has issued to ACME the Construction Permit BPCDT-19991029ACG, for DTV Channel 51 operations, a copy of which is attached as Attachment 1.

¹ The DTV Channel 51 allotment is designated with the letter "c" and is subject to pilot carrier frequency restrictions, pursuant to Section 73.622(g)(1) of the Commission's rules because the DTV station would operate on a channel above the analog TV station.

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2. Recently ACME entered into agreements with a tower company that would result in the highly efficient co-location of all of its analog and digital TV operations, for not only KASY-TV but also KWBQ(TV), Santa Fe, NM, which is also licensed to ACME, at a single new tower site using a common antenna. However, co-location of analog Channel 50 and DTV Channel 51 with a shared antenna is not possible. For that reason, ACME petitions for rulemaking to substitute DTV Channel 45 for DTV Channel 51 at Albuquerque.

3. As the attached engineering materials of TechWare, Inc. (the "Engineering Statement") indicate the proposed substitution of DTV Channel 45 for DTV Channel 51 will allow KASY-DT to collocate with the station's analog facilities on Channel 50 and to share the same antenna. ACME is prepared to tender at the earliest opportunity a Form 301 application for modification of construction permit to specify operation on Channel 45 at the following geographic coordinates: 35° 12' 48" North; 106 ° 27' 00" West with maximum effective radiated power of 245kw at a height above average terrain of 1287 meters and electrical beam tilt of 1.0 degree, as reflected in the attached Form 301, Section III-D Tech Box, a copy of which is attached hereto as Attachment 2.

4. The Commission has recognized the public interest efficiencies and benefits of co-located and shared analog and digital broadcast facilities and supported the efforts of broadcasters to avoid the burdens of operating and maintaining separate analog and digital facilities. ACME wishes to relocate the antenna site for KASY-DT to a single state of the art transmitter site with analog Channel 50 and to transmit all of its analog and digital signals from a single antenna. Unfortunately, if the DTV station operates on the allocated DTV Channel 51, this would not be possible. ACME accordingly has identified Channel 45 as a permissible substitute for KASY's DTV allotment at the relocated site. The channel

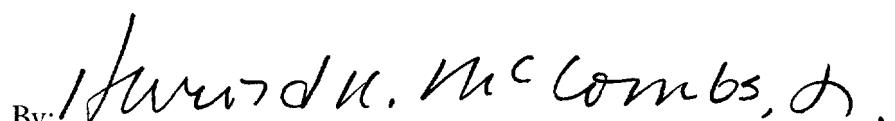
and location change for KASY-DT would improve DTV service for viewers in the Albuquerque, New Mexico DMA by allowing ACME to co-locate and share the analog and DTV facilities. The public interest would be served by the more efficient and cost-effective use of the broadcast spectrum.

5. As the attached Engineering Statement demonstrates, the proposed allotment fully complies with the Commission's technical requirements, including criteria for interference protection for both NTSC and DTV services. The proposed Channel 45 allotment will not have any adverse interference effects on any low power or Class A television station, and it encompasses the community of license as required under 47 C.F.R. §73.623(c)(1).

WHEREFORE, ACME requests that the Commission expeditiously commence a rulemaking proceeding to amend the DTV Table of Allotments to allot and assign DTV Channel 45 to Albuquerque, New Mexico (in lieu of Channel 51) for use by KASY-DT.

Respectfully submitted,

DICKSTEIN SHAPIRO MORIN & OSHINSKY LLP
Attorneys for
ACME TELEVISION OF NEW MEXICO, LLC

By: 
Harold K. McCombs, Jr.

May 2, 2001

Attachment 1



ATTORNEY

**United States of America
FEDERAL COMMUNICATIONS COMMISSION
DIGITAL TELEVISION BROADCAST STATION
CONSTRUCTION PERMIT**

Official Mailing Address:

ACME TELEVISION LICENSES OF NEW MEXICO, LLC
C/O DICKSTEIN SHAPIRO MORIN & OSHINSKY L
2101 L STREET NW
WASHINGTON DC 20037

Facility Id: 55049

Call Sign: KASY-DT

Permit File Number: BPCDT-19991029ACG

Authorizing Official

Clay C. Pendarvis

Clay C. Pendarvis

Chief, Television Branch

Video Services Division

Mass Media Bureau

Grant Date: **FEB 5 2001**

This permit expires 3:00 a.m.
local time, May 01, 2002.

Subject to the provisions of the Communications Act of 1934, as amended, subsequent acts and treaties, and all regulations heretofore or hereafter made by this Commission, and further subject to the conditions set forth in this permit, the permittee is hereby authorized to construct the radio transmitting apparatus herein described. Installation and adjustment of equipment not specifically set forth herein shall be in accordance with representations contained in the permittee's application for construction permit except for such modifications as are presently permitted, without application, by the Commission's Rules.

Equipment and program tests shall be conducted only pursuant to Sections 73.1610 and 73.1620 of the Commission's Rules.

Name of Permittee: ACME TELEVISION LICENSES OF NEW MEXICO, LLC

Station Location: NM-ALBUQUERQUE

Frequency (MHz): 692 - 698

Channel: 51

Hours of Operation: Unlimited

Transmitter: Type Accepted. See Sections 73.1660, 73.1665 and 73.1670 of the Commission's Rules.

Antenna type: (directional or non-directional): Non-Directional

Description: DIE, TFU-36GTH 06

Beam Tilt: 0.75 Degrees Electrical

Major lobe directions (degrees true): Not Applicable

Antenna Coordinates: North Latitude: 35 deg 12 min 44 sec

West Longitude: 106 deg 26 min 57 sec

Transmitter output power: As required to achieve authorized ERP.

Maximum effective radiated power (Average): 245 kW
23.9 DBK

Height of radiation center above ground: 52 Meters

Height of radiation center above mean sea level: 3295 Meters

Height of radiation center above average terrain: 1289 Meters

Antenna structure registration number: None

Overall height of antenna structure above ground: 61 meters.

Special operating conditions or restrictions:

- 1 The grant of this construction permit is subject to the condition that, with ample time before commencing operation, you make a good faith effort to identify and notify health care facilities (e.g., hospitals, nursing homes, see 47 CFR 15.242(a)(1)) within your service area potentially affected by your DTV operations. Contact with state and/or local hospital associations and local governmental health care licensing authorities may prove helpful in this process. During this pre-broadcast period, you must provide all notified entities with relevant technical details of your operation, such as DTV channel, targeted on-air date, effective radiated power, antenna location, and antenna height. You are required to place in the station's public inspection file documentation of the notifications and contacts made and you may not commence operations until good faith efforts have been made to notify affected health care facilities. During this pre-broadcast period and for up to twenty (20) days after commencing operations, should you become aware of any instances of medical devices malfunctioning or that such devices are likely to malfunction due to your DTV operations, you must cooperate with the health care facility so that it is afforded a reasonable opportunity to resolve the interference problem. At such time as all provisions of this condition have been fulfilled, and either upon the expiration of twenty (20) days following commencement of operations or when all known interference problems have been resolved, whichever is later, this condition lapses.

*** END OF AUTHORIZATION ***

Attachment 2

SECTION III-D DTV Engineering

TECHNICAL SPECIFICATIONS

Ensure that the specifications below are accurate. Contradicting data found elsewhere in this application will be disregarded. All items must be completed. The response "on file" is not acceptable.

TECH BOX

1. Channel Number: DTV 45 Analog TV, if any 50

2. Zone: I II III

3. Antenna Location Coordinates: (NAD 27)

35 ° 12' 48" N S Latitude
106 ° 27' 00" E W Longitude

4. Antenna Structure Registration Number:
FAA Study No. 00-ASW-4132-OE 8/29/00 No hazard to 91 m AGL 3325 m AMSL
 Not applicable FAA Notification Filed with FAA

5. Antenna Location Site Elevation Above Mean Sea Level: 3234 meters

6. Overall Tower Height Above Ground Level: 86 meters

7. Height of Radiation Center Above Ground Level: 67 meters

8. Height of Radiation Center Above Average Terrain: 1287 meters

9. Maximum Effective Radiated Power (average power): 245 kW

10. Antenna Specifications:

| | | | |
|-----------------|---------------------------------|-------|-------------------------------------|
| a. Manufacturer | <input type="text"/> Dielectric | Model | <input type="text"/> TUD-O5-8/40H-T |
|-----------------|---------------------------------|-------|-------------------------------------|

b. Electrical Beam Tilt: 1.0 / 2.75 degrees Not Applicable

c. Mechanical Beam Tilt: _____ degrees toward azimuth _____ degrees True Not Applicable

Attach as an Exhibit all data specified in 47 C.F.R. Section 73.625(c).

Exhibit No.
#1

d. Polarization: Horizontal Circular Elliptical

TECH BOX

| e. Directional Antenna Relative Field Values: | | | | <input checked="" type="checkbox"/> | Not applicable (Nondirectional) | | | | | | |
|---|-------|--------|-------|-------------------------------------|---------------------------------|--------|-------|--------|-------|--------|-------|
| Rotation: 0° | | | | <input type="checkbox"/> | No rotation | | | | | | |
| Degree | Value | Degree | Value | Degree | Value | Degree | Value | Degree | Value | Degree | Value |
| 0 | 60 | 120 | | 180 | | 240 | | 300 | | | |
| 10 | 70 | 130 | | 190 | | 250 | | 310 | | | |
| 20 | 80 | 140 | | 200 | | 260 | | 320 | | | |
| 30 | 90 | 150 | | 210 | | 270 | | 330 | | | |
| 40 | 100 | 160 | | 220 | | 280 | | 340 | | | |
| 50 | 110 | 170 | | 230 | | 290 | | 350 | | | |
| Additional Azimuths | | | | | | | | | | | |

If a directional antenna is proposed, the requirements of 47 C.F.R. Section 73.625(c) must be satisfied. **Exhibit required.**

Exhibit No.

11. Does the proposed facility satisfy the interference protection provisions of 47 C.F.R. Section 73.623(a)? (Applicable only if **Certification Checklist** Items 1(a), (b), or (c) are answered "No.")

If "No," attach as an Exhibit justification therefor, including a summary of any related previously granted waivers.

Exhibit No.
#2

12. If the proposed facility will not satisfy the coverage requirement of 47 C.F.R. Section 73.625, attach as an Exhibit justification therefor. (Applicable only if **Certification Checklist** Item 3 is answered "No.")

Exhibit No.

13. **Environmental Protection Act.** Submit in an Exhibit the following:

Exhibit No.
#3

- a. If **Certification Checklist** Item 3 is answered "Yes," a brief explanation of why an Environmental Assessment is not required. Also describe in the Exhibit the steps that will be taken to limit RF radiation exposure to the public and to persons authorized access to the tower site.

By checking "Yes" to **Certification Checklist** Item 3, the applicant also certifies that it, in coordination with other users of the site, will reduce power or cease operation as necessary to protect persons having access to the site, tower or antenna from radiofrequency electromagnetic exposure in excess of FCC guidelines.

If **Certification Checklist** Item 3 is answered "No," an Environmental Assessment as required by 47 C.F.R. Section 1.1311.

PREPARER'S CERTIFICATION IN SECTION III MUST BE COMPLETED AND SIGNED.

Exhibit # 1

**KASY-DT Channel 45
Albuquerque, NM**

Antenna Description

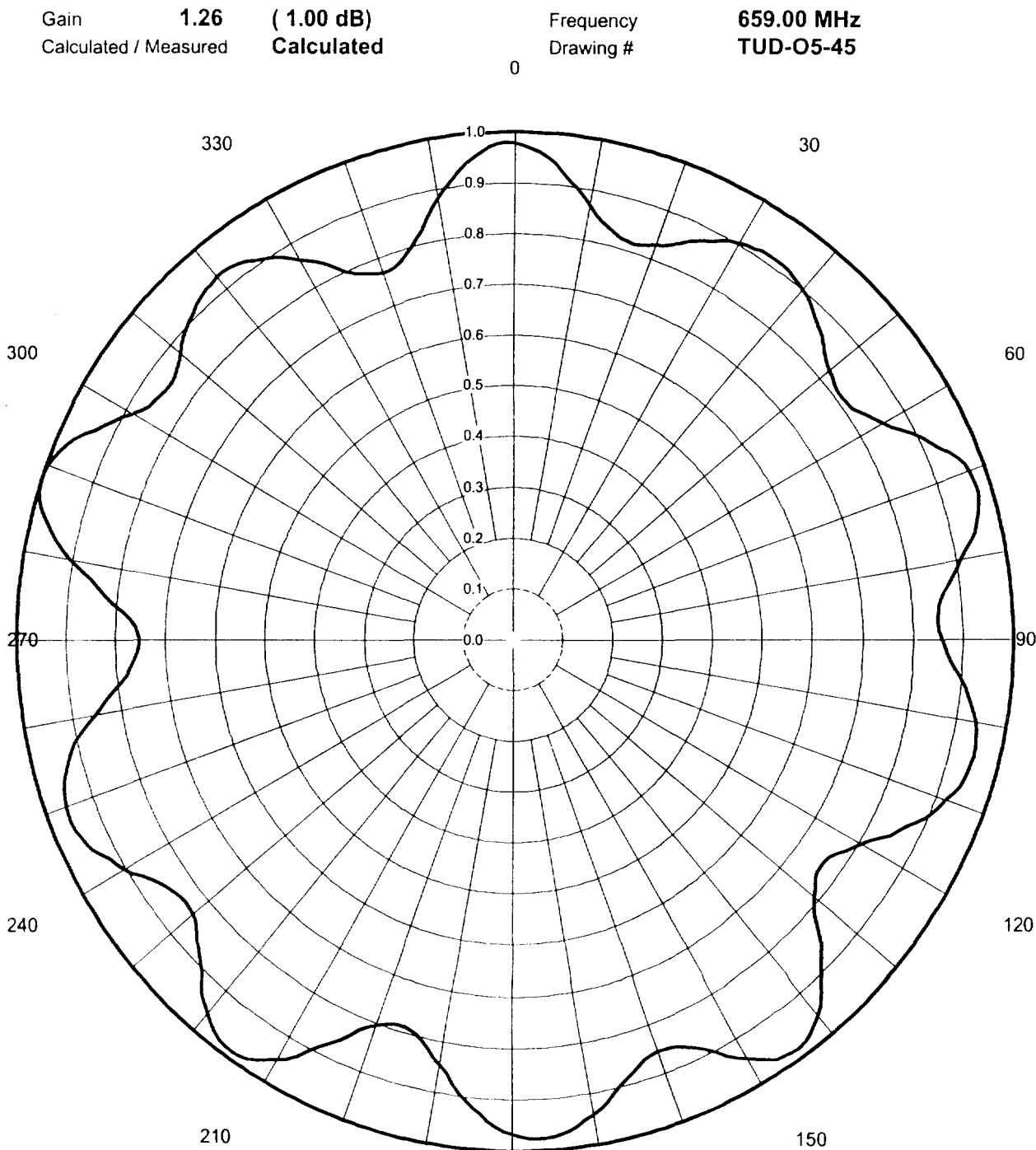
The following are the horizontal and vertical antenna patterns and a tabulation of the relative field values for the proposed antenna. The proposed antenna is a Dielectric Model TUD-O5-8/40H-T. It should be noted that the proposed antenna has two different electrical beam tilts. Over the arc from 324 degrees to 108 degrees the tilt is 1.0 degrees. Over the arc from 108 degrees to 324 degrees the tilt is 2.75 degrees.

Exhibit #1

Dielectric

Proposal Number
Date **4-Nov-00**
Call Letters **KASY-DT Channel 45**
Location **Albuquerque, NM**
Customer
Antenna Type **TUD-O5-8/40H-T**

AZIMUTH PATTERN



KASY-DT Channel 45 Albuquerque, NM Exhibit #1
 Horizontal Pattern Antenna: Dielectric TUD-05-8/40H-T

| Azimuth | Relative Azimuth |
|---------|------------------|---------|------------------|---------|------------------|---------|------------------|---------|------------------|---------|------------------|---------|------------------|---------|------------------|
| | Field |
| 0 | 0.978 | 52 | 0.814 | 104 | 0.949 | 156 | 0.871 | 208 | 0.924 | 260 | 0.853 | 312 | 0.892 | | |
| 1 | 0.974 | 53 | 0.811 | 105 | 0.947 | 157 | 0.863 | 209 | 0.939 | 261 | 0.837 | 313 | 0.899 | | |
| 2 | 0.969 | 54 | 0.811 | 106 | 0.945 | 158 | 0.856 | 210 | 0.951 | 262 | 0.824 | 314 | 0.904 | | |
| 3 | 0.961 | 55 | 0.812 | 107 | 0.942 | 159 | 0.854 | 211 | 0.961 | 263 | 0.808 | 315 | 0.910 | | |
| 4 | 0.953 | 56 | 0.815 | 108 | 0.938 | 160 | 0.854 | 212 | 0.971 | 264 | 0.792 | 316 | 0.917 | | |
| 5 | 0.943 | 57 | 0.824 | 109 | 0.930 | 161 | 0.856 | 213 | 0.979 | 265 | 0.779 | 317 | 0.921 | | |
| 6 | 0.925 | 58 | 0.833 | 110 | 0.920 | 162 | 0.860 | 214 | 0.984 | 266 | 0.771 | 318 | 0.924 | | |
| 7 | 0.912 | 59 | 0.842 | 111 | 0.913 | 163 | 0.869 | 215 | 0.986 | 267 | 0.763 | 319 | 0.926 | | |
| 8 | 0.900 | 60 | 0.852 | 112 | 0.905 | 164 | 0.879 | 216 | 0.985 | 268 | 0.758 | 320 | 0.930 | | |
| 9 | 0.885 | 61 | 0.862 | 113 | 0.895 | 165 | 0.888 | 217 | 0.982 | 269 | 0.753 | 321 | 0.930 | | |
| 10 | 0.869 | 62 | 0.878 | 114 | 0.880 | 166 | 0.897 | 218 | 0.976 | 270 | 0.752 | 322 | 0.929 | | |
| 11 | 0.854 | 63 | 0.895 | 115 | 0.868 | 167 | 0.909 | 219 | 0.966 | 271 | 0.756 | 323 | 0.925 | | |
| 12 | 0.844 | 64 | 0.908 | 116 | 0.857 | 168 | 0.922 | 220 | 0.956 | 272 | 0.762 | 324 | 0.920 | | |
| 13 | 0.836 | 65 | 0.919 | 117 | 0.847 | 169 | 0.932 | 221 | 0.947 | 273 | 0.770 | 325 | 0.912 | | |
| 14 | 0.826 | 66 | 0.930 | 118 | 0.831 | 170 | 0.940 | 222 | 0.937 | 274 | 0.786 | 326 | 0.904 | | |
| 15 | 0.820 | 67 | 0.944 | 119 | 0.815 | 171 | 0.948 | 223 | 0.918 | 275 | 0.806 | 327 | 0.896 | | |
| 16 | 0.818 | 68 | 0.956 | 120 | 0.804 | 172 | 0.957 | 224 | 0.903 | 276 | 0.825 | 328 | 0.888 | | |
| 17 | 0.817 | 69 | 0.964 | 121 | 0.794 | 173 | 0.965 | 225 | 0.892 | 277 | 0.841 | 329 | 0.876 | | |
| 18 | 0.819 | 70 | 0.968 | 122 | 0.785 | 174 | 0.971 | 226 | 0.881 | 278 | 0.858 | 330 | 0.864 | | |
| 19 | 0.823 | 71 | 0.972 | 123 | 0.774 | 175 | 0.974 | 227 | 0.870 | 279 | 0.880 | 331 | 0.853 | | |
| 20 | 0.829 | 72 | 0.973 | 124 | 0.766 | 176 | 0.975 | 228 | 0.857 | 280 | 0.906 | 332 | 0.843 | | |
| 21 | 0.832 | 73 | 0.972 | 125 | 0.763 | 177 | 0.975 | 229 | 0.846 | 281 | 0.924 | 333 | 0.831 | | |
| 22 | 0.840 | 74 | 0.967 | 126 | 0.762 | 178 | 0.974 | 230 | 0.841 | 282 | 0.941 | 334 | 0.815 | | |
| 23 | 0.849 | 75 | 0.962 | 127 | 0.763 | 179 | 0.971 | 231 | 0.838 | 283 | 0.954 | 335 | 0.800 | | |
| 24 | 0.860 | 76 | 0.955 | 128 | 0.769 | 180 | 0.967 | 232 | 0.837 | 284 | 0.969 | 336 | 0.790 | | |
| 25 | 0.868 | 77 | 0.947 | 129 | 0.780 | 181 | 0.962 | 233 | 0.838 | 285 | 0.983 | 337 | 0.783 | | |
| 26 | 0.875 | 78 | 0.935 | 130 | 0.789 | 182 | 0.953 | 234 | 0.843 | 286 | 0.992 | 338 | 0.777 | | |
| 27 | 0.882 | 79 | 0.920 | 131 | 0.801 | 183 | 0.944 | 235 | 0.849 | 287 | 0.997 | 339 | 0.771 | | |
| 28 | 0.891 | 80 | 0.908 | 132 | 0.815 | 184 | 0.930 | 236 | 0.857 | 288 | 0.999 | 340 | 0.769 | | |
| 29 | 0.898 | 81 | 0.898 | 133 | 0.839 | 185 | 0.919 | 237 | 0.866 | 289 | 1.000 | 341 | 0.770 | | |
| 30 | 0.904 | 82 | 0.887 | 134 | 0.859 | 186 | 0.907 | 238 | 0.879 | 290 | 0.997 | 342 | 0.772 | | |
| 31 | 0.908 | 83 | 0.875 | 135 | 0.874 | 187 | 0.893 | 239 | 0.893 | 291 | 0.992 | 343 | 0.778 | | |
| 32 | 0.910 | 84 | 0.864 | 136 | 0.889 | 188 | 0.876 | 240 | 0.902 | 292 | 0.985 | 344 | 0.789 | | |
| 33 | 0.914 | 85 | 0.856 | 137 | 0.908 | 189 | 0.857 | 241 | 0.911 | 293 | 0.977 | 345 | 0.799 | | |
| 34 | 0.916 | 86 | 0.852 | 138 | 0.928 | 190 | 0.844 | 242 | 0.919 | 294 | 0.968 | 346 | 0.812 | | |
| 35 | 0.916 | 87 | 0.850 | 139 | 0.944 | 191 | 0.833 | 243 | 0.931 | 295 | 0.954 | 347 | 0.826 | | |
| 36 | 0.915 | 88 | 0.850 | 140 | 0.955 | 192 | 0.819 | 244 | 0.942 | 296 | 0.937 | 348 | 0.846 | | |
| 37 | 0.914 | 89 | 0.852 | 141 | 0.964 | 193 | 0.805 | 245 | 0.948 | 297 | 0.924 | 349 | 0.867 | | |
| 38 | 0.910 | 90 | 0.857 | 142 | 0.973 | 194 | 0.796 | 246 | 0.953 | 298 | 0.911 | 350 | 0.882 | | |
| 39 | 0.905 | 91 | 0.863 | 143 | 0.979 | 195 | 0.791 | 247 | 0.956 | 299 | 0.900 | 351 | 0.897 | | |
| 40 | 0.901 | 92 | 0.869 | 144 | 0.983 | 196 | 0.788 | 248 | 0.959 | 300 | 0.885 | 352 | 0.913 | | |
| 41 | 0.896 | 93 | 0.876 | 145 | 0.981 | 197 | 0.787 | 249 | 0.959 | 301 | 0.872 | 353 | 0.929 | | |
| 42 | 0.889 | 94 | 0.887 | 146 | 0.979 | 198 | 0.791 | 250 | 0.956 | 302 | 0.864 | 354 | 0.943 | | |
| 43 | 0.879 | 95 | 0.898 | 147 | 0.975 | 199 | 0.796 | 251 | 0.954 | 303 | 0.859 | 355 | 0.953 | | |
| 44 | 0.872 | 96 | 0.908 | 148 | 0.964 | 200 | 0.803 | 252 | 0.950 | 304 | 0.855 | 356 | 0.963 | | |
| 45 | 0.865 | 97 | 0.916 | 149 | 0.952 | 201 | 0.812 | 253 | 0.944 | 305 | 0.852 | 357 | 0.972 | | |
| 46 | 0.858 | 98 | 0.924 | 150 | 0.942 | 202 | 0.824 | 254 | 0.934 | 306 | 0.851 | 358 | 0.979 | | |
| 47 | 0.848 | 99 | 0.932 | 151 | 0.931 | 203 | 0.841 | 255 | 0.926 | 307 | 0.853 | 359 | 0.980 | | |
| 48 | 0.838 | 100 | 0.939 | 152 | 0.920 | 204 | 0.858 | 256 | 0.917 | 308 | 0.858 | | | | |
| 49 | 0.830 | 101 | 0.944 | 153 | 0.902 | 205 | 0.872 | 257 | 0.906 | 309 | 0.864 | | | | |
| 50 | 0.825 | 102 | 0.946 | 154 | 0.888 | 206 | 0.886 | 258 | 0.891 | 310 | 0.873 | | | | |
| 51 | 0.820 | 103 | 0.948 | 155 | 0.879 | 207 | 0.904 | 259 | 0.873 | 311 | 0.884 | | | | |

Exhibit #1

Dielectric

Proposal Number

Date **1-Nov-00**

Call Letters **KASY-DT** Channel **45**

Location

Customer

Antenna Type

1-Nov-00

KASY-DT Channel 45

Albuquerque, NM

TUD-O5-8/40-T

ELEVATION PATTERN

RMS Gain at Main Lobe

17.50 (12.43 dB)

Beam Tilt

1.00 deg

RMS Gain at Horizontal

12.20 (10.86 dB)

Frequency

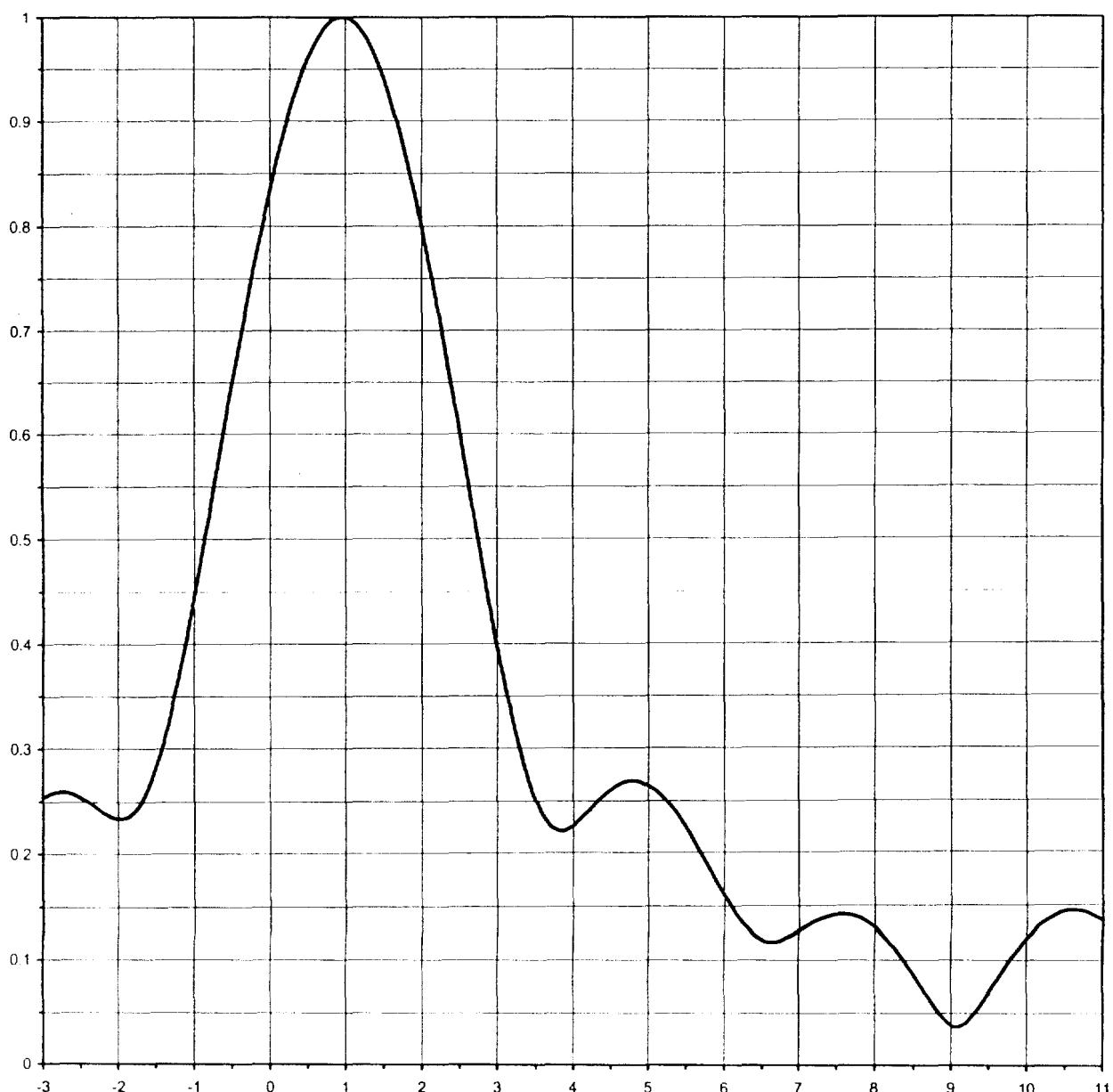
659.00 MHz

Calculated / Measured

Calculated

Drawing #

08U175100



KASY-DT Channel 45 Albuquerque, NM Exhibit #1
Vertical Pattern 1.0 degree electrical beam tilt Antenna: Dielectric TUD-O5-8/40H-T

| Angle | Relative | Angle | Relative | Angle | Relative | Angle | Relative | Angle | Relative | Angle | Relative | Angle | Relative | Angle | Relative |
|---------|----------|--------|----------|-------|----------|--------|----------|--------|----------|--------|----------|--------|----------|-------|----------|
| | Field | | Field | | Field | | Field | | Field | | Field | | Field | | Field |
| -10.000 | 0.059 | -4.900 | 0.114 | 0.200 | 0.894 | 5.300 | 0.244 | 10.400 | 0.142 | 15.500 | 0.040 | 20.600 | 0.061 | | |
| -9.900 | 0.073 | -4.800 | 0.103 | 0.300 | 0.919 | 5.400 | 0.234 | 10.500 | 0.144 | 15.600 | 0.041 | 20.700 | 0.059 | | |
| -9.800 | 0.087 | -4.700 | 0.093 | 0.400 | 0.942 | 5.500 | 0.223 | 10.600 | 0.145 | 15.700 | 0.044 | 20.800 | 0.057 | | |
| -9.700 | 0.099 | -4.600 | 0.085 | 0.500 | 0.961 | 5.600 | 0.211 | 10.700 | 0.144 | 15.800 | 0.049 | 20.900 | 0.055 | | |
| -9.600 | 0.111 | -4.500 | 0.082 | 0.600 | 0.976 | 5.700 | 0.199 | 10.800 | 0.142 | 15.900 | 0.054 | 21.000 | 0.053 | | |
| -9.500 | 0.123 | -4.400 | 0.082 | 0.700 | 0.988 | 5.800 | 0.186 | 10.900 | 0.139 | 16.000 | 0.059 | 21.100 | 0.052 | | |
| -9.400 | 0.133 | -4.300 | 0.088 | 0.800 | 0.996 | 5.900 | 0.173 | 11.000 | 0.135 | 16.100 | 0.064 | 21.200 | 0.052 | | |
| -9.300 | 0.142 | -4.200 | 0.099 | 0.900 | 1.000 | 6.000 | 0.160 | 11.100 | 0.129 | 16.200 | 0.069 | 21.300 | 0.053 | | |
| -9.200 | 0.149 | -4.100 | 0.112 | 1.000 | 1.000 | 6.100 | 0.148 | 11.200 | 0.122 | 16.300 | 0.073 | 21.400 | 0.055 | | |
| -9.100 | 0.156 | -4.000 | 0.127 | 1.100 | 0.996 | 6.200 | 0.138 | 11.300 | 0.113 | 16.400 | 0.077 | 21.500 | 0.057 | | |
| -9.000 | 0.161 | -3.900 | 0.143 | 1.200 | 0.987 | 6.300 | 0.129 | 11.400 | 0.104 | 16.500 | 0.079 | 21.600 | 0.060 | | |
| -8.900 | 0.164 | -3.800 | 0.159 | 1.300 | 0.976 | 6.400 | 0.122 | 11.500 | 0.094 | 16.600 | 0.082 | 21.700 | 0.064 | | |
| -8.800 | 0.166 | -3.700 | 0.175 | 1.400 | 0.960 | 6.500 | 0.118 | 11.600 | 0.083 | 16.700 | 0.083 | 21.800 | 0.068 | | |
| -8.700 | 0.166 | -3.600 | 0.190 | 1.500 | 0.941 | 6.600 | 0.117 | 11.700 | 0.072 | 16.800 | 0.084 | 21.900 | 0.072 | | |
| -8.600 | 0.165 | -3.500 | 0.205 | 1.600 | 0.918 | 6.700 | 0.117 | 11.800 | 0.060 | 16.900 | 0.084 | 22.000 | 0.076 | | |
| -8.500 | 0.162 | -3.400 | 0.218 | 1.700 | 0.892 | 6.800 | 0.119 | 11.900 | 0.048 | 17.000 | 0.083 | 22.100 | 0.081 | | |
| -8.400 | 0.158 | -3.300 | 0.229 | 1.800 | 0.864 | 6.900 | 0.123 | 12.000 | 0.035 | 17.100 | 0.081 | 22.200 | 0.085 | | |
| -8.300 | 0.152 | -3.200 | 0.239 | 1.900 | 0.832 | 7.000 | 0.127 | 12.100 | 0.023 | 17.200 | 0.078 | 22.300 | 0.089 | | |
| -8.200 | 0.146 | -3.100 | 0.247 | 2.000 | 0.798 | 7.100 | 0.131 | 12.200 | 0.011 | 17.300 | 0.075 | 22.400 | 0.093 | | |
| -8.100 | 0.138 | -3.000 | 0.253 | 2.100 | 0.762 | 7.200 | 0.135 | 12.300 | 0.010 | 17.400 | 0.071 | 22.500 | 0.096 | | |
| -8.000 | 0.129 | -2.900 | 0.257 | 2.200 | 0.724 | 7.300 | 0.138 | 12.400 | 0.020 | 17.500 | 0.067 | 22.600 | 0.099 | | |
| -7.900 | 0.119 | -2.800 | 0.259 | 2.300 | 0.684 | 7.400 | 0.140 | 12.500 | 0.032 | 17.600 | 0.062 | 22.700 | 0.101 | | |
| -7.800 | 0.108 | -2.700 | 0.259 | 2.400 | 0.643 | 7.500 | 0.142 | 12.600 | 0.043 | 17.700 | 0.057 | 22.800 | 0.103 | | |
| -7.700 | 0.098 | -2.600 | 0.257 | 2.500 | 0.601 | 7.600 | 0.142 | 12.700 | 0.055 | 17.800 | 0.052 | 22.900 | 0.105 | | |
| -7.600 | 0.088 | -2.500 | 0.254 | 2.600 | 0.559 | 7.700 | 0.141 | 12.800 | 0.065 | 17.900 | 0.047 | 23.000 | 0.106 | | |
| -7.500 | 0.079 | -2.400 | 0.250 | 2.700 | 0.517 | 7.800 | 0.138 | 12.900 | 0.075 | 18.000 | 0.042 | 23.100 | 0.106 | | |
| -7.400 | 0.072 | -2.300 | 0.245 | 2.800 | 0.476 | 7.900 | 0.134 | 13.000 | 0.084 | 18.100 | 0.037 | 23.200 | 0.107 | | |
| -7.300 | 0.068 | -2.200 | 0.239 | 2.900 | 0.435 | 8.000 | 0.129 | 13.100 | 0.093 | 18.200 | 0.034 | 23.300 | 0.106 | | |
| -7.200 | 0.068 | -2.100 | 0.235 | 3.000 | 0.396 | 8.100 | 0.123 | 13.200 | 0.100 | 18.300 | 0.032 | 23.400 | 0.106 | | |
| -7.100 | 0.072 | -2.000 | 0.233 | 3.100 | 0.359 | 8.200 | 0.115 | 13.300 | 0.106 | 18.400 | 0.031 | 23.500 | 0.104 | | |
| -7.000 | 0.079 | -1.900 | 0.234 | 3.200 | 0.326 | 8.300 | 0.106 | 13.400 | 0.111 | 18.500 | 0.032 | 23.600 | 0.103 | | |
| -6.900 | 0.088 | -1.800 | 0.239 | 3.300 | 0.296 | 8.400 | 0.097 | 13.500 | 0.115 | 18.600 | 0.035 | 23.700 | 0.100 | | |
| -6.800 | 0.099 | -1.700 | 0.248 | 3.400 | 0.270 | 8.500 | 0.086 | 13.600 | 0.118 | 18.700 | 0.038 | 23.800 | 0.098 | | |
| -6.700 | 0.110 | -1.600 | 0.263 | 3.500 | 0.249 | 8.600 | 0.075 | 13.700 | 0.120 | 18.800 | 0.042 | 23.900 | 0.095 | | |
| -6.600 | 0.121 | -1.500 | 0.283 | 3.600 | 0.234 | 8.700 | 0.064 | 13.800 | 0.121 | 18.900 | 0.047 | 24.000 | 0.091 | | |
| -6.500 | 0.132 | -1.400 | 0.308 | 3.700 | 0.225 | 8.800 | 0.054 | 13.900 | 0.120 | 19.000 | 0.051 | 24.100 | 0.088 | | |
| -6.400 | 0.141 | -1.300 | 0.337 | 3.800 | 0.221 | 8.900 | 0.045 | 14.000 | 0.119 | 19.100 | 0.055 | 24.200 | 0.085 | | |
| -6.300 | 0.150 | -1.200 | 0.370 | 3.900 | 0.222 | 9.000 | 0.038 | 14.100 | 0.116 | 19.200 | 0.059 | 24.300 | 0.081 | | |
| -6.200 | 0.158 | -1.100 | 0.406 | 4.000 | 0.226 | 9.100 | 0.037 | 14.200 | 0.113 | 19.300 | 0.062 | 24.400 | 0.077 | | |
| -6.100 | 0.164 | -1.000 | 0.444 | 4.100 | 0.233 | 9.200 | 0.041 | 14.300 | 0.108 | 19.400 | 0.065 | 24.500 | 0.072 | | |
| -6.000 | 0.169 | -0.900 | 0.484 | 4.200 | 0.240 | 9.300 | 0.049 | 14.400 | 0.103 | 19.500 | 0.068 | 24.600 | 0.068 | | |
| -5.900 | 0.172 | -0.800 | 0.524 | 4.300 | 0.247 | 9.400 | 0.059 | 14.500 | 0.097 | 19.600 | 0.070 | 24.700 | 0.063 | | |
| -5.800 | 0.173 | -0.700 | 0.565 | 4.400 | 0.254 | 9.500 | 0.070 | 14.600 | 0.091 | 19.700 | 0.071 | 24.800 | 0.059 | | |
| -5.700 | 0.173 | -0.600 | 0.607 | 4.500 | 0.260 | 9.600 | 0.081 | 14.700 | 0.084 | 19.800 | 0.072 | 24.900 | 0.054 | | |
| -5.600 | 0.170 | -0.500 | 0.648 | 4.600 | 0.265 | 9.700 | 0.092 | 14.800 | 0.076 | 19.900 | 0.072 | 25.000 | 0.049 | | |
| -5.500 | 0.166 | -0.400 | 0.688 | 4.700 | 0.267 | 9.800 | 0.102 | 14.900 | 0.069 | 20.000 | 0.072 | 25.100 | 0.047 | | |
| -5.400 | 0.161 | -0.300 | 0.727 | 4.800 | 0.268 | 9.900 | 0.111 | 15.000 | 0.062 | 20.100 | 0.071 | 25.200 | 0.044 | | |
| -5.300 | 0.154 | -0.200 | 0.765 | 4.900 | 0.267 | 10.000 | 0.120 | 15.100 | 0.055 | 20.200 | 0.070 | 25.300 | 0.041 | | |
| -5.200 | 0.145 | -0.100 | 0.801 | 5.000 | 0.264 | 10.100 | 0.127 | 15.200 | 0.049 | 20.300 | 0.068 | 25.400 | 0.038 | | |
| -5.100 | 0.135 | 0.000 | 0.834 | 5.100 | 0.259 | 10.200 | 0.133 | 15.300 | 0.044 | 20.400 | 0.066 | 25.500 | 0.035 | | |
| -5.000 | 0.125 | 0.100 | 0.865 | 5.200 | 0.252 | 10.300 | 0.138 | 15.400 | 0.041 | 20.500 | 0.064 | 25.600 | 0.032 | | |

KASY-DT Channel 45 Albuquerque, NM Exhibit #1
 Vertical Pattern 1.0 degree electrical beam tilt Antenna: Dielectric TUD-O5-8/40H-T

| Angle | Relative | Angle | Relative |
|--------|----------|--------|----------|--------|----------|--------|----------|--------|----------|--------|----------|--------|----------|-------|----------|
| | Field | | Field |
| 25.700 | 0.029 | 30.800 | 0.022 | 35.900 | 0.045 | 41.000 | 0.026 | 46.100 | 0.051 | 51.200 | 0.177 | 56.300 | 0.109 | | |
| 25.800 | 0.026 | 30.900 | 0.023 | 36.000 | 0.043 | 41.100 | 0.024 | 46.200 | 0.054 | 51.300 | 0.182 | 56.400 | 0.103 | | |
| 25.900 | 0.024 | 31.000 | 0.024 | 36.100 | 0.041 | 41.200 | 0.023 | 46.300 | 0.057 | 51.400 | 0.188 | 56.500 | 0.098 | | |
| 26.000 | 0.021 | 31.100 | 0.025 | 36.200 | 0.039 | 41.300 | 0.023 | 46.400 | 0.060 | 51.500 | 0.193 | 56.600 | 0.093 | | |
| 26.100 | 0.020 | 31.200 | 0.026 | 36.300 | 0.036 | 41.400 | 0.024 | 46.500 | 0.062 | 51.600 | 0.197 | 56.700 | 0.089 | | |
| 26.200 | 0.019 | 31.300 | 0.027 | 36.400 | 0.033 | 41.500 | 0.025 | 46.600 | 0.065 | 51.700 | 0.202 | 56.800 | 0.084 | | |
| 26.300 | 0.018 | 31.400 | 0.028 | 36.500 | 0.030 | 41.600 | 0.027 | 46.700 | 0.067 | 51.800 | 0.206 | 56.900 | 0.079 | | |
| 26.400 | 0.017 | 31.500 | 0.029 | 36.600 | 0.026 | 41.700 | 0.029 | 46.800 | 0.069 | 51.900 | 0.210 | 57.000 | 0.075 | | |
| 26.500 | 0.016 | 31.600 | 0.030 | 36.700 | 0.023 | 41.800 | 0.032 | 46.900 | 0.070 | 52.000 | 0.214 | 57.100 | 0.071 | | |
| 26.600 | 0.015 | 31.700 | 0.030 | 36.800 | 0.019 | 41.900 | 0.035 | 47.000 | 0.072 | 52.100 | 0.217 | 57.200 | 0.067 | | |
| 26.700 | 0.014 | 31.800 | 0.031 | 36.900 | 0.015 | 42.000 | 0.037 | 47.100 | 0.073 | 52.200 | 0.220 | 57.300 | 0.063 | | |
| 26.800 | 0.014 | 31.900 | 0.031 | 37.000 | 0.011 | 42.100 | 0.040 | 47.200 | 0.074 | 52.300 | 0.222 | 57.400 | 0.059 | | |
| 26.900 | 0.013 | 32.000 | 0.030 | 37.100 | 0.007 | 42.200 | 0.043 | 47.300 | 0.074 | 52.400 | 0.225 | 57.500 | 0.056 | | |
| 27.000 | 0.012 | 32.100 | 0.030 | 37.200 | 0.004 | 42.300 | 0.045 | 47.400 | 0.074 | 52.500 | 0.227 | 57.600 | 0.053 | | |
| 27.100 | 0.012 | 32.200 | 0.029 | 37.300 | 0.004 | 42.400 | 0.047 | 47.500 | 0.074 | 52.600 | 0.228 | 57.700 | 0.051 | | |
| 27.200 | 0.012 | 32.300 | 0.028 | 37.400 | 0.008 | 42.500 | 0.049 | 47.600 | 0.074 | 52.700 | 0.229 | 57.800 | 0.048 | | |
| 27.300 | 0.013 | 32.400 | 0.027 | 37.500 | 0.012 | 42.600 | 0.051 | 47.700 | 0.073 | 52.800 | 0.230 | 57.900 | 0.046 | | |
| 27.400 | 0.013 | 32.500 | 0.026 | 37.600 | 0.016 | 42.700 | 0.053 | 47.800 | 0.073 | 52.900 | 0.231 | 58.000 | 0.045 | | |
| 27.500 | 0.014 | 32.600 | 0.024 | 37.700 | 0.020 | 42.800 | 0.054 | 47.900 | 0.072 | 53.000 | 0.231 | 58.100 | 0.043 | | |
| 27.600 | 0.015 | 32.700 | 0.022 | 37.800 | 0.025 | 42.900 | 0.055 | 48.000 | 0.071 | 53.100 | 0.231 | 58.200 | 0.042 | | |
| 27.700 | 0.016 | 32.800 | 0.020 | 37.900 | 0.028 | 43.000 | 0.056 | 48.100 | 0.070 | 53.200 | 0.231 | 58.300 | 0.041 | | |
| 27.800 | 0.018 | 32.900 | 0.018 | 38.000 | 0.032 | 43.100 | 0.056 | 48.200 | 0.068 | 53.300 | 0.230 | 58.400 | 0.041 | | |
| 27.900 | 0.019 | 33.000 | 0.016 | 38.100 | 0.036 | 43.200 | 0.056 | 48.300 | 0.067 | 53.400 | 0.229 | 58.500 | 0.041 | | |
| 28.000 | 0.020 | 33.100 | 0.014 | 38.200 | 0.039 | 43.300 | 0.056 | 48.400 | 0.066 | 53.500 | 0.228 | 58.600 | 0.041 | | |
| 28.100 | 0.021 | 33.200 | 0.012 | 38.300 | 0.043 | 43.400 | 0.056 | 48.500 | 0.065 | 53.600 | 0.226 | 58.700 | 0.041 | | |
| 28.200 | 0.023 | 33.300 | 0.011 | 38.400 | 0.046 | 43.500 | 0.055 | 48.600 | 0.064 | 53.700 | 0.224 | 58.800 | 0.041 | | |
| 28.300 | 0.024 | 33.400 | 0.010 | 38.500 | 0.049 | 43.600 | 0.054 | 48.700 | 0.064 | 53.800 | 0.222 | 58.900 | 0.041 | | |
| 28.400 | 0.025 | 33.500 | 0.011 | 38.600 | 0.051 | 43.700 | 0.052 | 48.800 | 0.064 | 53.900 | 0.220 | 59.000 | 0.042 | | |
| 28.500 | 0.026 | 33.600 | 0.012 | 38.700 | 0.053 | 43.800 | 0.051 | 48.900 | 0.064 | 54.000 | 0.217 | 59.100 | 0.042 | | |
| 28.600 | 0.027 | 33.700 | 0.015 | 38.800 | 0.055 | 43.900 | 0.049 | 49.000 | 0.065 | 54.100 | 0.214 | 59.200 | 0.043 | | |
| 28.700 | 0.028 | 33.800 | 0.017 | 38.900 | 0.057 | 44.000 | 0.047 | 49.100 | 0.067 | 54.200 | 0.211 | 59.300 | 0.043 | | |
| 28.800 | 0.028 | 33.900 | 0.020 | 39.000 | 0.058 | 44.100 | 0.044 | 49.200 | 0.069 | 54.300 | 0.207 | 59.400 | 0.044 | | |
| 28.900 | 0.028 | 34.000 | 0.023 | 39.100 | 0.059 | 44.200 | 0.042 | 49.300 | 0.072 | 54.400 | 0.204 | 59.500 | 0.044 | | |
| 29.000 | 0.028 | 34.100 | 0.026 | 39.200 | 0.059 | 44.300 | 0.039 | 49.400 | 0.075 | 54.500 | 0.200 | 59.600 | 0.045 | | |
| 29.100 | 0.028 | 34.200 | 0.029 | 39.300 | 0.059 | 44.400 | 0.037 | 49.500 | 0.079 | 54.600 | 0.195 | 59.700 | 0.045 | | |
| 29.200 | 0.028 | 34.300 | 0.032 | 39.400 | 0.059 | 44.500 | 0.034 | 49.600 | 0.084 | 54.700 | 0.191 | 59.800 | 0.045 | | |
| 29.300 | 0.028 | 34.400 | 0.035 | 39.500 | 0.059 | 44.600 | 0.032 | 49.700 | 0.088 | 54.800 | 0.187 | 59.900 | 0.045 | | |
| 29.400 | 0.027 | 34.500 | 0.037 | 39.600 | 0.058 | 44.700 | 0.029 | 49.800 | 0.093 | 54.900 | 0.182 | 60.000 | 0.046 | | |
| 29.500 | 0.026 | 34.600 | 0.040 | 39.700 | 0.057 | 44.800 | 0.028 | 49.900 | 0.099 | 55.000 | 0.177 | 60.100 | 0.046 | | |
| 29.600 | 0.025 | 34.700 | 0.042 | 39.800 | 0.055 | 44.900 | 0.026 | 50.000 | 0.104 | 55.100 | 0.172 | 60.200 | 0.046 | | |
| 29.700 | 0.024 | 34.800 | 0.044 | 39.900 | 0.054 | 45.000 | 0.025 | 50.100 | 0.110 | 55.200 | 0.167 | 60.300 | 0.045 | | |
| 29.800 | 0.023 | 34.900 | 0.045 | 40.000 | 0.052 | 45.100 | 0.025 | 50.200 | 0.116 | 55.300 | 0.162 | 60.400 | 0.045 | | |
| 29.900 | 0.023 | 35.000 | 0.047 | 40.100 | 0.049 | 45.200 | 0.026 | 50.300 | 0.122 | 55.400 | 0.157 | 60.500 | 0.045 | | |
| 30.000 | 0.022 | 35.100 | 0.048 | 40.200 | 0.047 | 45.300 | 0.027 | 50.400 | 0.129 | 55.500 | 0.151 | 60.600 | 0.044 | | |
| 30.100 | 0.021 | 35.200 | 0.049 | 40.300 | 0.044 | 45.400 | 0.030 | 50.500 | 0.135 | 55.600 | 0.146 | 60.700 | 0.044 | | |
| 30.200 | 0.020 | 35.300 | 0.049 | 40.400 | 0.042 | 45.500 | 0.032 | 50.600 | 0.141 | 55.700 | 0.141 | 60.800 | 0.043 | | |
| 30.300 | 0.020 | 35.400 | 0.049 | 40.500 | 0.039 | 45.600 | 0.035 | 50.700 | 0.147 | 55.800 | 0.135 | 60.900 | 0.043 | | |
| 30.400 | 0.020 | 35.500 | 0.049 | 40.600 | 0.036 | 45.700 | 0.038 | 50.800 | 0.154 | 55.900 | 0.130 | 61.000 | 0.042 | | |
| 30.500 | 0.020 | 35.600 | 0.049 | 40.700 | 0.033 | 45.800 | 0.041 | 50.900 | 0.160 | 56.000 | 0.124 | 61.100 | 0.041 | | |
| 30.600 | 0.020 | 35.700 | 0.048 | 40.800 | 0.030 | 45.900 | 0.045 | 51.000 | 0.166 | 56.100 | 0.119 | 61.200 | 0.041 | | |
| 30.700 | 0.021 | 35.800 | 0.047 | 40.900 | 0.028 | 46.000 | 0.048 | 51.100 | 0.171 | 56.200 | 0.114 | 61.300 | 0.040 | | |

KASY-DT Channel 45 Albuquerque, NM Exhibit #1
 Vertical Pattern 1.0 degree electrical beam tilt Antenna: Dielectric TUD-O5-8/40H-T

| Angle | Relative |
|--------|----------|--------|----------|--------|----------|--------|----------|--------|----------|--------|----------|
| | Field |
| 61.400 | 0.039 | 66.500 | 0.017 | 71.600 | 0.005 | 76.700 | 0.009 | 81.800 | 0.003 | 86.900 | 0.000 |
| 61.500 | 0.038 | 66.600 | 0.017 | 71.700 | 0.006 | 76.800 | 0.009 | 81.900 | 0.003 | 87.000 | 0.000 |
| 61.600 | 0.037 | 66.700 | 0.017 | 71.800 | 0.006 | 76.900 | 0.009 | 82.000 | 0.003 | 87.100 | 0.000 |
| 61.700 | 0.036 | 66.800 | 0.017 | 71.900 | 0.006 | 77.000 | 0.009 | 82.100 | 0.003 | 87.200 | 0.000 |
| 61.800 | 0.035 | 66.900 | 0.017 | 72.000 | 0.006 | 77.100 | 0.009 | 82.200 | 0.002 | 87.300 | 0.000 |
| 61.900 | 0.034 | 67.000 | 0.017 | 72.100 | 0.007 | 77.200 | 0.009 | 82.300 | 0.002 | 87.400 | 0.000 |
| 62.000 | 0.033 | 67.100 | 0.016 | 72.200 | 0.007 | 77.300 | 0.008 | 82.400 | 0.002 | 87.500 | 0.000 |
| 62.100 | 0.032 | 67.200 | 0.016 | 72.300 | 0.007 | 77.400 | 0.008 | 82.500 | 0.002 | 87.600 | 0.000 |
| 62.200 | 0.031 | 67.300 | 0.016 | 72.400 | 0.007 | 77.500 | 0.008 | 82.600 | 0.002 | 87.700 | 0.000 |
| 62.300 | 0.030 | 67.400 | 0.016 | 72.500 | 0.008 | 77.600 | 0.008 | 82.700 | 0.002 | 87.800 | 0.000 |
| 62.400 | 0.029 | 67.500 | 0.015 | 72.600 | 0.008 | 77.700 | 0.008 | 82.800 | 0.002 | 87.900 | 0.000 |
| 62.500 | 0.028 | 67.600 | 0.015 | 72.700 | 0.008 | 77.800 | 0.008 | 82.900 | 0.002 | 88.000 | 0.000 |
| 62.600 | 0.027 | 67.700 | 0.015 | 72.800 | 0.008 | 77.900 | 0.008 | 83.000 | 0.002 | 88.100 | 0.000 |
| 62.700 | 0.026 | 67.800 | 0.014 | 72.900 | 0.009 | 78.000 | 0.008 | 83.100 | 0.002 | 88.200 | 0.000 |
| 62.800 | 0.025 | 67.900 | 0.014 | 73.000 | 0.009 | 78.100 | 0.007 | 83.200 | 0.002 | 88.300 | 0.000 |
| 62.900 | 0.024 | 68.000 | 0.014 | 73.100 | 0.009 | 78.200 | 0.007 | 83.300 | 0.002 | 88.400 | 0.000 |
| 63.000 | 0.023 | 68.100 | 0.013 | 73.200 | 0.009 | 78.300 | 0.007 | 83.400 | 0.001 | 88.500 | 0.000 |
| 63.100 | 0.022 | 68.200 | 0.013 | 73.300 | 0.009 | 78.400 | 0.007 | 83.500 | 0.001 | 88.600 | 0.001 |
| 63.200 | 0.021 | 68.300 | 0.012 | 73.400 | 0.009 | 78.500 | 0.007 | 83.600 | 0.001 | 88.700 | 0.001 |
| 63.300 | 0.020 | 68.400 | 0.012 | 73.500 | 0.009 | 78.600 | 0.007 | 83.700 | 0.001 | 88.800 | 0.001 |
| 63.400 | 0.020 | 68.500 | 0.011 | 73.600 | 0.010 | 78.700 | 0.007 | 83.800 | 0.001 | 88.900 | 0.001 |
| 63.500 | 0.019 | 68.600 | 0.011 | 73.700 | 0.010 | 78.800 | 0.006 | 83.900 | 0.001 | 89.000 | 0.001 |
| 63.600 | 0.018 | 68.700 | 0.010 | 73.800 | 0.010 | 78.900 | 0.006 | 84.000 | 0.001 | 89.100 | 0.001 |
| 63.700 | 0.018 | 68.800 | 0.010 | 73.900 | 0.010 | 79.000 | 0.006 | 84.100 | 0.001 | 89.200 | 0.001 |
| 63.800 | 0.017 | 68.900 | 0.009 | 74.000 | 0.010 | 79.100 | 0.006 | 84.200 | 0.001 | 89.300 | 0.001 |
| 63.900 | 0.017 | 69.000 | 0.009 | 74.100 | 0.010 | 79.200 | 0.006 | 84.300 | 0.001 | 89.400 | 0.001 |
| 64.000 | 0.017 | 69.100 | 0.009 | 74.200 | 0.010 | 79.300 | 0.006 | 84.400 | 0.001 | 89.500 | 0.001 |
| 64.100 | 0.016 | 69.200 | 0.008 | 74.300 | 0.010 | 79.400 | 0.006 | 84.500 | 0.001 | 89.600 | 0.001 |
| 64.200 | 0.016 | 69.300 | 0.008 | 74.400 | 0.010 | 79.500 | 0.006 | 84.600 | 0.001 | 89.700 | 0.001 |
| 64.300 | 0.016 | 69.400 | 0.007 | 74.500 | 0.010 | 79.600 | 0.005 | 84.700 | 0.001 | 89.800 | 0.001 |
| 64.400 | 0.016 | 69.500 | 0.007 | 74.600 | 0.010 | 79.700 | 0.005 | 84.800 | 0.001 | 89.900 | 0.001 |
| 64.500 | 0.016 | 69.600 | 0.006 | 74.700 | 0.010 | 79.800 | 0.005 | 84.900 | 0.001 | 90.000 | 0.001 |
| 64.600 | 0.016 | 69.700 | 0.006 | 74.800 | 0.010 | 79.900 | 0.005 | 85.000 | 0.001 | | |
| 64.700 | 0.016 | 69.800 | 0.006 | 74.900 | 0.010 | 80.000 | 0.005 | 85.100 | 0.001 | | |
| 64.800 | 0.016 | 69.900 | 0.005 | 75.000 | 0.010 | 80.100 | 0.005 | 85.200 | 0.001 | | |
| 64.900 | 0.016 | 70.000 | 0.005 | 75.100 | 0.010 | 80.200 | 0.005 | 85.300 | 0.000 | | |
| 65.000 | 0.017 | 70.100 | 0.004 | 75.200 | 0.010 | 80.300 | 0.004 | 85.400 | 0.000 | | |
| 65.100 | 0.017 | 70.200 | 0.004 | 75.300 | 0.010 | 80.400 | 0.004 | 85.500 | 0.000 | | |
| 65.200 | 0.017 | 70.300 | 0.004 | 75.400 | 0.010 | 80.500 | 0.004 | 85.600 | 0.000 | | |
| 65.300 | 0.017 | 70.400 | 0.004 | 75.500 | 0.010 | 80.600 | 0.004 | 85.700 | 0.000 | | |
| 65.400 | 0.017 | 70.500 | 0.004 | 75.600 | 0.010 | 80.700 | 0.004 | 85.800 | 0.000 | | |
| 65.500 | 0.017 | 70.600 | 0.004 | 75.700 | 0.010 | 80.800 | 0.004 | 85.900 | 0.000 | | |
| 65.600 | 0.017 | 70.700 | 0.004 | 75.800 | 0.010 | 80.900 | 0.004 | 86.000 | 0.000 | | |
| 65.700 | 0.017 | 70.800 | 0.004 | 75.900 | 0.010 | 81.000 | 0.004 | 86.100 | 0.000 | | |
| 65.800 | 0.018 | 70.900 | 0.004 | 76.000 | 0.010 | 81.100 | 0.004 | 86.200 | 0.000 | | |
| 65.900 | 0.018 | 71.000 | 0.004 | 76.100 | 0.010 | 81.200 | 0.003 | 86.300 | 0.000 | | |
| 66.000 | 0.018 | 71.100 | 0.004 | 76.200 | 0.010 | 81.300 | 0.003 | 86.400 | 0.000 | | |
| 66.100 | 0.018 | 71.200 | 0.004 | 76.300 | 0.010 | 81.400 | 0.003 | 86.500 | 0.000 | | |
| 66.200 | 0.018 | 71.300 | 0.005 | 76.400 | 0.009 | 81.500 | 0.003 | 86.600 | 0.000 | | |
| 66.300 | 0.018 | 71.400 | 0.005 | 76.500 | 0.009 | 81.600 | 0.003 | 86.700 | 0.000 | | |
| 66.400 | 0.018 | 71.500 | 0.005 | 76.600 | 0.009 | 81.700 | 0.003 | 86.800 | 0.000 | | |

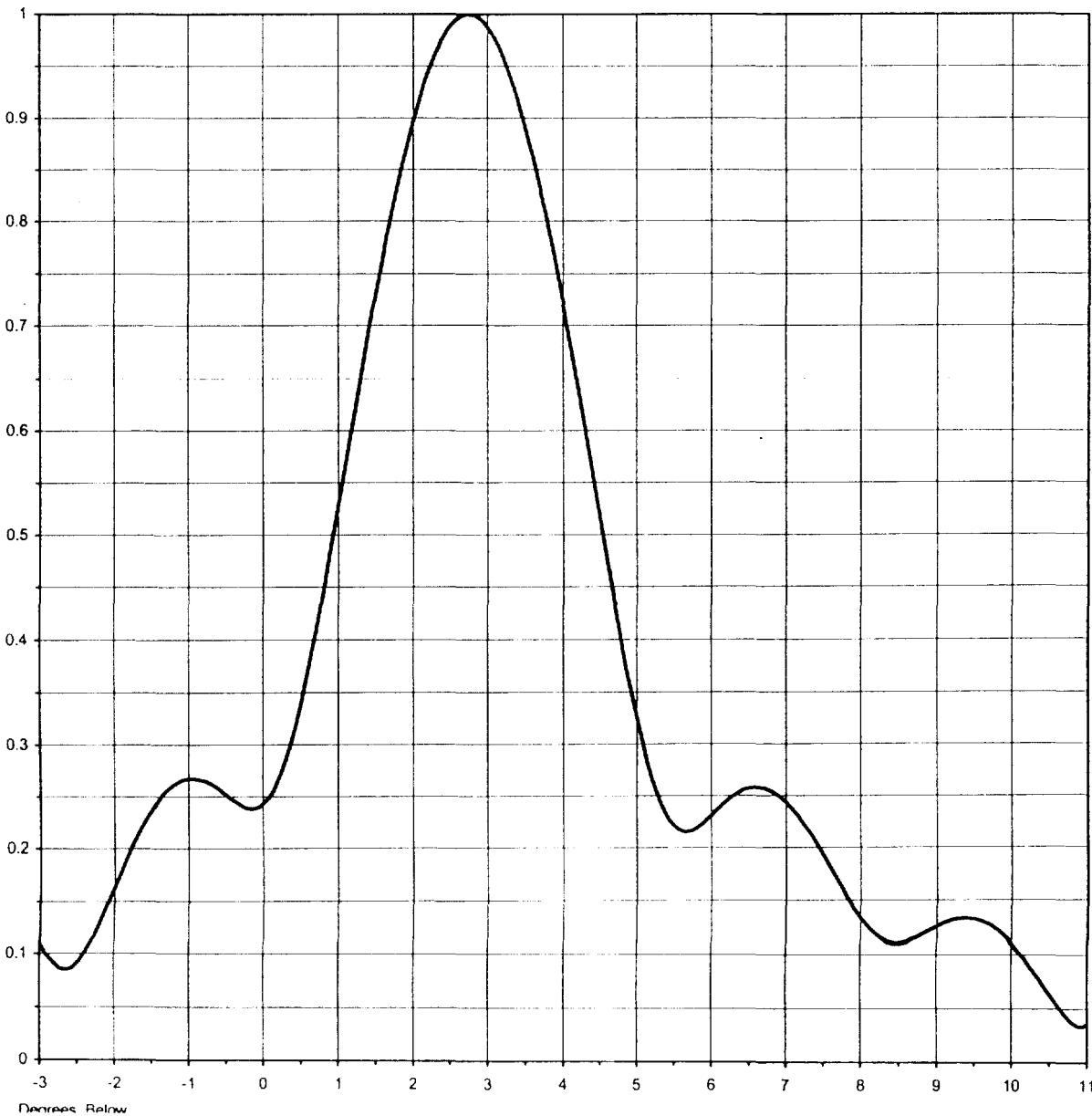
Exhibit #1

Dielectric

Proposal Number
Date **7-Nov-00**
Call Letters **KASY-DT** Channel **45**
Location **Albuquerque, NM**
Customer
Antenna Type **TUD-O5-8/40H-T**

ELEVATION PATTERN

RMS Gain at Main Lobe **16.90 (12.28 dB)** Beam Tilt **2.75 deg**
RMS Gain at Horizontal **1.00 (0.00 dB)** Frequency **659.00 MHz**
Calculated / Measured **Calculated** Drawing # **08U169275**



KASY-DT Channel 45 Albuquerque, NM Exhibit #1
 Vertical Pattern 2.75 degree electrical beam tilt Antenna: Dielectric TUD-O5-8/40H-T

| Angle | Relative | Angle | Relative | Angle | Relative | Angle | Relative | Angle | Relative | Angle | Relative | Angle | Relative | Angle | Relative |
|---------|----------|--------|----------|-------|----------|--------|----------|--------|----------|--------|----------|--------|----------|-------|----------|
| | Field | | Field | | Field | | Field | | Field | | Field | | Field | | Field |
| -10.000 | 0.151 | -4.900 | 0.115 | 0.200 | 0.266 | 5.300 | 0.247 | 10.400 | 0.074 | 15.500 | 0.103 | 20.600 | 0.027 | | |
| -9.900 | 0.149 | -4.800 | 0.127 | 0.300 | 0.286 | 5.400 | 0.231 | 10.500 | 0.063 | 15.600 | 0.104 | 20.700 | 0.030 | | |
| -9.800 | 0.146 | -4.700 | 0.138 | 0.400 | 0.310 | 5.500 | 0.221 | 10.600 | 0.053 | 15.700 | 0.104 | 20.800 | 0.032 | | |
| -9.700 | 0.141 | -4.600 | 0.149 | 0.500 | 0.339 | 5.600 | 0.216 | 10.700 | 0.044 | 15.800 | 0.103 | 20.900 | 0.035 | | |
| -9.600 | 0.134 | -4.500 | 0.159 | 0.600 | 0.372 | 5.700 | 0.216 | 10.800 | 0.037 | 15.900 | 0.102 | 21.000 | 0.038 | | |
| -9.500 | 0.127 | -4.400 | 0.167 | 0.700 | 0.408 | 5.800 | 0.219 | 10.900 | 0.034 | 16.000 | 0.099 | 21.100 | 0.041 | | |
| -9.400 | 0.118 | -4.300 | 0.174 | 0.800 | 0.446 | 5.900 | 0.225 | 11.000 | 0.036 | 16.100 | 0.096 | 21.200 | 0.043 | | |
| -9.300 | 0.107 | -4.200 | 0.179 | 0.900 | 0.486 | 6.000 | 0.232 | 11.100 | 0.042 | 16.200 | 0.092 | 21.300 | 0.045 | | |
| -9.200 | 0.096 | -4.100 | 0.182 | 1.000 | 0.527 | 6.100 | 0.239 | 11.200 | 0.050 | 16.300 | 0.087 | 21.400 | 0.047 | | |
| -9.100 | 0.083 | -4.000 | 0.184 | 1.100 | 0.569 | 6.200 | 0.245 | 11.300 | 0.060 | 16.400 | 0.081 | 21.500 | 0.048 | | |
| -9.000 | 0.070 | -3.900 | 0.183 | 1.200 | 0.610 | 6.300 | 0.251 | 11.400 | 0.070 | 16.500 | 0.076 | 21.600 | 0.049 | | |
| -8.900 | 0.055 | -3.800 | 0.181 | 1.300 | 0.651 | 6.400 | 0.255 | 11.500 | 0.079 | 16.600 | 0.070 | 21.700 | 0.049 | | |
| -8.800 | 0.040 | -3.700 | 0.177 | 1.400 | 0.692 | 6.500 | 0.258 | 11.600 | 0.089 | 16.700 | 0.063 | 21.800 | 0.049 | | |
| -8.700 | 0.025 | -3.600 | 0.171 | 1.500 | 0.731 | 6.600 | 0.258 | 11.700 | 0.098 | 16.800 | 0.057 | 21.900 | 0.049 | | |
| -8.600 | 0.013 | -3.500 | 0.164 | 1.600 | 0.769 | 6.700 | 0.257 | 11.800 | 0.106 | 16.900 | 0.051 | 22.000 | 0.048 | | |
| -8.500 | 0.014 | -3.400 | 0.155 | 1.700 | 0.805 | 6.800 | 0.255 | 11.900 | 0.113 | 17.000 | 0.045 | 22.100 | 0.047 | | |
| -8.400 | 0.028 | -3.300 | 0.145 | 1.800 | 0.838 | 6.900 | 0.250 | 12.000 | 0.118 | 17.100 | 0.040 | 22.200 | 0.045 | | |
| -8.300 | 0.044 | -3.200 | 0.133 | 1.900 | 0.869 | 7.000 | 0.244 | 12.100 | 0.123 | 17.200 | 0.036 | 22.300 | 0.044 | | |
| -8.200 | 0.060 | -3.100 | 0.122 | 2.000 | 0.898 | 7.100 | 0.236 | 12.200 | 0.127 | 17.300 | 0.033 | 22.400 | 0.042 | | |
| -8.100 | 0.076 | -3.000 | 0.110 | 2.100 | 0.923 | 7.200 | 0.226 | 12.300 | 0.129 | 17.400 | 0.033 | 22.500 | 0.040 | | |
| -8.000 | 0.091 | -2.900 | 0.099 | 2.200 | 0.945 | 7.300 | 0.216 | 12.400 | 0.131 | 17.500 | 0.034 | 22.600 | 0.038 | | |
| -7.900 | 0.105 | -2.800 | 0.091 | 2.300 | 0.963 | 7.400 | 0.204 | 12.500 | 0.130 | 17.600 | 0.036 | 22.700 | 0.036 | | |
| -7.800 | 0.119 | -2.700 | 0.086 | 2.400 | 0.978 | 7.500 | 0.192 | 12.600 | 0.129 | 17.700 | 0.040 | 22.800 | 0.034 | | |
| -7.700 | 0.132 | -2.600 | 0.086 | 2.500 | 0.989 | 7.600 | 0.180 | 12.700 | 0.127 | 17.800 | 0.044 | 22.900 | 0.033 | | |
| -7.600 | 0.143 | -2.500 | 0.091 | 2.600 | 0.996 | 7.700 | 0.167 | 12.800 | 0.123 | 17.900 | 0.047 | 23.000 | 0.032 | | |
| -7.500 | 0.153 | -2.400 | 0.101 | 2.700 | 1.000 | 7.800 | 0.155 | 12.900 | 0.118 | 18.000 | 0.051 | 23.100 | 0.031 | | |
| -7.400 | 0.162 | -2.300 | 0.114 | 2.800 | 1.000 | 7.900 | 0.143 | 13.000 | 0.112 | 18.100 | 0.055 | 23.200 | 0.031 | | |
| -7.300 | 0.169 | -2.200 | 0.130 | 2.900 | 0.996 | 8.000 | 0.133 | 13.100 | 0.106 | 18.200 | 0.058 | 23.300 | 0.031 | | |
| -7.200 | 0.175 | -2.100 | 0.146 | 3.000 | 0.988 | 8.100 | 0.124 | 13.200 | 0.098 | 18.300 | 0.060 | 23.400 | 0.032 | | |
| -7.100 | 0.179 | -2.000 | 0.163 | 3.100 | 0.975 | 8.200 | 0.117 | 13.300 | 0.089 | 18.400 | 0.062 | 23.500 | 0.033 | | |
| -7.000 | 0.182 | -1.900 | 0.180 | 3.200 | 0.959 | 8.300 | 0.113 | 13.400 | 0.080 | 18.500 | 0.064 | 23.600 | 0.035 | | |
| -6.900 | 0.182 | -1.800 | 0.196 | 3.300 | 0.940 | 8.400 | 0.110 | 13.500 | 0.070 | 18.600 | 0.065 | 23.700 | 0.036 | | |
| -6.800 | 0.181 | -1.700 | 0.211 | 3.400 | 0.917 | 8.500 | 0.110 | 13.600 | 0.060 | 18.700 | 0.065 | 23.800 | 0.038 | | |
| -6.700 | 0.179 | -1.600 | 0.224 | 3.500 | 0.891 | 8.600 | 0.111 | 13.700 | 0.049 | 18.800 | 0.064 | 23.900 | 0.039 | | |
| -6.600 | 0.174 | -1.500 | 0.236 | 3.600 | 0.862 | 8.700 | 0.114 | 13.800 | 0.038 | 18.900 | 0.063 | 24.000 | 0.041 | | |
| -6.500 | 0.169 | -1.400 | 0.247 | 3.700 | 0.831 | 8.800 | 0.118 | 13.900 | 0.027 | 19.000 | 0.062 | 24.100 | 0.043 | | |
| -6.400 | 0.161 | -1.300 | 0.255 | 3.800 | 0.796 | 8.900 | 0.122 | 14.000 | 0.016 | 19.100 | 0.060 | 24.200 | 0.044 | | |
| -6.300 | 0.153 | -1.200 | 0.261 | 3.900 | 0.760 | 9.000 | 0.125 | 14.100 | 0.008 | 19.200 | 0.057 | 24.300 | 0.045 | | |
| -6.200 | 0.143 | -1.100 | 0.266 | 4.000 | 0.722 | 9.100 | 0.129 | 14.200 | 0.012 | 19.300 | 0.054 | 24.400 | 0.046 | | |
| -6.100 | 0.132 | -1.000 | 0.268 | 4.100 | 0.682 | 9.200 | 0.131 | 14.300 | 0.021 | 19.400 | 0.051 | 24.500 | 0.047 | | |
| -6.000 | 0.121 | -0.900 | 0.268 | 4.200 | 0.641 | 9.300 | 0.132 | 14.400 | 0.032 | 19.500 | 0.047 | 24.600 | 0.047 | | |
| -5.900 | 0.109 | -0.800 | 0.266 | 4.300 | 0.600 | 9.400 | 0.133 | 14.500 | 0.042 | 19.600 | 0.043 | 24.700 | 0.047 | | |
| -5.800 | 0.098 | -0.700 | 0.262 | 4.400 | 0.558 | 9.500 | 0.132 | 14.600 | 0.051 | 19.700 | 0.039 | 24.800 | 0.047 | | |
| -5.700 | 0.088 | -0.600 | 0.257 | 4.500 | 0.516 | 9.600 | 0.130 | 14.700 | 0.060 | 19.800 | 0.035 | 24.900 | 0.046 | | |
| -5.600 | 0.079 | -0.500 | 0.252 | 4.600 | 0.474 | 9.700 | 0.127 | 14.800 | 0.069 | 19.900 | 0.031 | 25.000 | 0.045 | | |
| -5.500 | 0.074 | -0.400 | 0.246 | 4.700 | 0.434 | 9.800 | 0.122 | 14.900 | 0.076 | 20.000 | 0.028 | 25.100 | 0.045 | | |
| -5.400 | 0.073 | -0.300 | 0.242 | 4.800 | 0.395 | 9.900 | 0.116 | 15.000 | 0.083 | 20.100 | 0.025 | 25.200 | 0.045 | | |
| -5.300 | 0.076 | -0.200 | 0.239 | 4.900 | 0.358 | 10.000 | 0.110 | 15.100 | 0.089 | 20.200 | 0.023 | 25.300 | 0.045 | | |
| -5.200 | 0.083 | -0.100 | 0.239 | 5.000 | 0.325 | 10.100 | 0.102 | 15.200 | 0.094 | 20.300 | 0.023 | 25.400 | 0.045 | | |
| -5.100 | 0.092 | 0.000 | 0.243 | 5.100 | 0.294 | 10.200 | 0.093 | 15.300 | 0.098 | 20.400 | 0.023 | 25.500 | 0.044 | | |
| -5.000 | 0.103 | 0.100 | 0.252 | 5.200 | 0.268 | 10.300 | 0.084 | 15.400 | 0.101 | 20.500 | 0.025 | 25.600 | 0.043 | | |

KASY-DT Channel 45 Albuquerque, NM Exhibit #1
 Vertical Pattern 2.75 degree electrical beam tilt Antenna: Dielectric TUD-O5-8/40H-T

| Angle | Relative | Angle | Relative |
|--------|----------|--------|----------|--------|----------|--------|----------|--------|----------|--------|----------|--------|----------|-------|----------|
| | Field | | Field |
| 25.700 | 0.042 | 30.800 | 0.046 | 35.900 | 0.017 | 41.000 | 0.055 | 46.100 | 0.054 | 51.200 | 0.061 | 56.300 | 0.203 | | |
| 25.800 | 0.041 | 30.900 | 0.046 | 36.000 | 0.020 | 41.100 | 0.057 | 46.200 | 0.052 | 51.300 | 0.060 | 56.400 | 0.202 | | |
| 25.900 | 0.040 | 31.000 | 0.046 | 36.100 | 0.023 | 41.200 | 0.058 | 46.300 | 0.051 | 51.400 | 0.060 | 56.500 | 0.201 | | |
| 26.000 | 0.038 | 31.100 | 0.045 | 36.200 | 0.026 | 41.300 | 0.060 | 46.400 | 0.049 | 51.500 | 0.059 | 56.600 | 0.200 | | |
| 26.100 | 0.039 | 31.200 | 0.045 | 36.300 | 0.030 | 41.400 | 0.061 | 46.500 | 0.047 | 51.600 | 0.059 | 56.700 | 0.199 | | |
| 26.200 | 0.041 | 31.300 | 0.044 | 36.400 | 0.033 | 41.500 | 0.061 | 46.600 | 0.045 | 51.700 | 0.059 | 56.800 | 0.197 | | |
| 26.300 | 0.041 | 31.400 | 0.042 | 36.500 | 0.036 | 41.600 | 0.062 | 46.700 | 0.043 | 51.800 | 0.060 | 56.900 | 0.196 | | |
| 26.400 | 0.042 | 31.500 | 0.041 | 36.600 | 0.039 | 41.700 | 0.062 | 46.800 | 0.041 | 51.900 | 0.061 | 57.000 | 0.194 | | |
| 26.500 | 0.043 | 31.600 | 0.039 | 36.700 | 0.042 | 41.800 | 0.062 | 46.900 | 0.038 | 52.000 | 0.063 | 57.100 | 0.191 | | |
| 26.600 | 0.043 | 31.700 | 0.038 | 36.800 | 0.045 | 41.900 | 0.061 | 47.000 | 0.036 | 52.100 | 0.065 | 57.200 | 0.189 | | |
| 26.700 | 0.044 | 31.800 | 0.036 | 36.900 | 0.047 | 42.000 | 0.060 | 47.100 | 0.033 | 52.200 | 0.067 | 57.300 | 0.186 | | |
| 26.800 | 0.044 | 31.900 | 0.034 | 37.000 | 0.049 | 42.100 | 0.059 | 47.200 | 0.031 | 52.300 | 0.070 | 57.400 | 0.184 | | |
| 26.900 | 0.044 | 32.000 | 0.033 | 37.100 | 0.051 | 42.200 | 0.057 | 47.300 | 0.029 | 52.400 | 0.073 | 57.500 | 0.181 | | |
| 27.000 | 0.044 | 32.100 | 0.031 | 37.200 | 0.053 | 42.300 | 0.055 | 47.400 | 0.027 | 52.500 | 0.077 | 57.600 | 0.178 | | |
| 27.100 | 0.045 | 32.200 | 0.030 | 37.300 | 0.054 | 42.400 | 0.053 | 47.500 | 0.025 | 52.600 | 0.081 | 57.700 | 0.174 | | |
| 27.200 | 0.046 | 32.300 | 0.028 | 37.400 | 0.055 | 42.500 | 0.051 | 47.600 | 0.025 | 52.700 | 0.085 | 57.800 | 0.171 | | |
| 27.300 | 0.047 | 32.400 | 0.028 | 37.500 | 0.055 | 42.600 | 0.049 | 47.700 | 0.024 | 52.800 | 0.090 | 57.900 | 0.167 | | |
| 27.400 | 0.047 | 32.500 | 0.027 | 37.600 | 0.055 | 42.700 | 0.046 | 47.800 | 0.025 | 52.900 | 0.094 | 58.000 | 0.164 | | |
| 27.500 | 0.047 | 32.600 | 0.027 | 37.700 | 0.055 | 42.800 | 0.043 | 47.900 | 0.026 | 53.000 | 0.099 | 58.100 | 0.160 | | |
| 27.600 | 0.047 | 32.700 | 0.027 | 37.800 | 0.055 | 42.900 | 0.040 | 48.000 | 0.027 | 53.100 | 0.104 | 58.200 | 0.156 | | |
| 27.700 | 0.047 | 32.800 | 0.028 | 37.900 | 0.054 | 43.000 | 0.037 | 48.100 | 0.030 | 53.200 | 0.109 | 58.300 | 0.152 | | |
| 27.800 | 0.046 | 32.900 | 0.029 | 38.000 | 0.053 | 43.100 | 0.035 | 48.200 | 0.032 | 53.300 | 0.115 | 58.400 | 0.148 | | |
| 27.900 | 0.045 | 33.000 | 0.030 | 38.100 | 0.051 | 43.200 | 0.032 | 48.300 | 0.035 | 53.400 | 0.120 | 58.500 | 0.144 | | |
| 28.000 | 0.044 | 33.100 | 0.031 | 38.200 | 0.049 | 43.300 | 0.029 | 48.400 | 0.038 | 53.500 | 0.125 | 58.600 | 0.139 | | |
| 28.100 | 0.043 | 33.200 | 0.032 | 38.300 | 0.047 | 43.400 | 0.027 | 48.500 | 0.040 | 53.600 | 0.130 | 58.700 | 0.135 | | |
| 28.200 | 0.042 | 33.300 | 0.034 | 38.400 | 0.045 | 43.500 | 0.025 | 48.600 | 0.043 | 53.700 | 0.135 | 58.800 | 0.131 | | |
| 28.300 | 0.040 | 33.400 | 0.035 | 38.500 | 0.042 | 43.600 | 0.024 | 48.700 | 0.046 | 53.800 | 0.140 | 58.900 | 0.126 | | |
| 28.400 | 0.039 | 33.500 | 0.036 | 38.600 | 0.039 | 43.700 | 0.023 | 48.800 | 0.049 | 53.900 | 0.145 | 59.000 | 0.122 | | |
| 28.500 | 0.037 | 33.600 | 0.037 | 38.700 | 0.036 | 43.800 | 0.024 | 48.900 | 0.052 | 54.000 | 0.150 | 59.100 | 0.118 | | |
| 28.600 | 0.035 | 33.700 | 0.038 | 38.800 | 0.032 | 43.900 | 0.025 | 49.000 | 0.054 | 54.100 | 0.154 | 59.200 | 0.113 | | |
| 28.700 | 0.033 | 33.800 | 0.038 | 38.900 | 0.028 | 44.000 | 0.026 | 49.100 | 0.057 | 54.200 | 0.159 | 59.300 | 0.109 | | |
| 28.800 | 0.032 | 33.900 | 0.038 | 39.000 | 0.025 | 44.100 | 0.028 | 49.200 | 0.059 | 54.300 | 0.163 | 59.400 | 0.105 | | |
| 28.900 | 0.030 | 34.000 | 0.038 | 39.100 | 0.020 | 44.200 | 0.030 | 49.300 | 0.061 | 54.400 | 0.168 | 59.500 | 0.101 | | |
| 29.000 | 0.029 | 34.100 | 0.038 | 39.200 | 0.016 | 44.300 | 0.033 | 49.400 | 0.063 | 54.500 | 0.172 | 59.600 | 0.097 | | |
| 29.100 | 0.028 | 34.200 | 0.038 | 39.300 | 0.012 | 44.400 | 0.035 | 49.500 | 0.065 | 54.600 | 0.175 | 59.700 | 0.092 | | |
| 29.200 | 0.028 | 34.300 | 0.037 | 39.400 | 0.008 | 44.500 | 0.038 | 49.600 | 0.066 | 54.700 | 0.179 | 59.800 | 0.088 | | |
| 29.300 | 0.028 | 34.400 | 0.036 | 39.500 | 0.004 | 44.600 | 0.040 | 49.700 | 0.067 | 54.800 | 0.182 | 59.900 | 0.084 | | |
| 29.400 | 0.028 | 34.500 | 0.034 | 39.600 | 0.004 | 44.700 | 0.043 | 49.800 | 0.068 | 54.900 | 0.186 | 60.000 | 0.080 | | |
| 29.500 | 0.029 | 34.600 | 0.033 | 39.700 | 0.008 | 44.800 | 0.045 | 49.900 | 0.069 | 55.000 | 0.188 | 60.100 | 0.077 | | |
| 29.600 | 0.030 | 34.700 | 0.031 | 39.800 | 0.012 | 44.900 | 0.047 | 50.000 | 0.069 | 55.100 | 0.191 | 60.200 | 0.073 | | |
| 29.700 | 0.032 | 34.800 | 0.029 | 39.900 | 0.016 | 45.000 | 0.049 | 50.100 | 0.070 | 55.200 | 0.193 | 60.300 | 0.069 | | |
| 29.800 | 0.033 | 34.900 | 0.026 | 40.000 | 0.021 | 45.100 | 0.051 | 50.200 | 0.070 | 55.300 | 0.196 | 60.400 | 0.066 | | |
| 29.900 | 0.035 | 35.000 | 0.024 | 40.100 | 0.025 | 45.200 | 0.052 | 50.300 | 0.069 | 55.400 | 0.197 | 60.500 | 0.062 | | |
| 30.000 | 0.037 | 35.100 | 0.021 | 40.200 | 0.029 | 45.300 | 0.054 | 50.400 | 0.069 | 55.500 | 0.199 | 60.600 | 0.059 | | |
| 30.100 | 0.039 | 35.200 | 0.019 | 40.300 | 0.033 | 45.400 | 0.055 | 50.500 | 0.068 | 55.600 | 0.200 | 60.700 | 0.056 | | |
| 30.200 | 0.040 | 35.300 | 0.016 | 40.400 | 0.037 | 45.500 | 0.055 | 50.600 | 0.068 | 55.700 | 0.202 | 60.800 | 0.053 | | |
| 30.300 | 0.042 | 35.400 | 0.014 | 40.500 | 0.040 | 45.600 | 0.056 | 50.700 | 0.067 | 55.800 | 0.202 | 60.900 | 0.050 | | |
| 30.400 | 0.043 | 35.500 | 0.012 | 40.600 | 0.044 | 45.700 | 0.056 | 50.800 | 0.066 | 55.900 | 0.203 | 61.000 | 0.048 | | |
| 30.500 | 0.044 | 35.600 | 0.012 | 40.700 | 0.047 | 45.800 | 0.056 | 50.900 | 0.065 | 56.000 | 0.203 | 61.100 | 0.045 | | |
| 30.600 | 0.045 | 35.700 | 0.013 | 40.800 | 0.050 | 45.900 | 0.055 | 51.000 | 0.064 | 56.100 | 0.203 | 61.200 | 0.043 | | |
| 30.700 | 0.046 | 35.800 | 0.014 | 40.900 | 0.052 | 46.000 | 0.054 | 51.100 | 0.062 | 56.200 | 0.203 | 61.300 | 0.041 | | |

KASY-DT Channel 45 Albuquerque, NM Exhibit #1
 Vertical Pattern 2.75 degree electrical beam tilt Antenna: Dielectric TUD-06-8/40H-T

| Angle | Relative | Angle | Relative |
|--------|----------|--------|----------|--------|----------|--------|----------|--------|----------|--------|----------|-------|----------|
| | Field | | Field |
| 61.400 | 0.039 | 66.500 | 0.023 | 71.600 | 0.012 | 76.700 | 0.002 | 81.800 | 0.005 | 86.900 | 0.004 | | |
| 61.500 | 0.038 | 66.600 | 0.022 | 71.700 | 0.012 | 76.800 | 0.002 | 81.900 | 0.005 | 87.000 | 0.004 | | |
| 61.600 | 0.037 | 66.700 | 0.021 | 71.800 | 0.012 | 76.900 | 0.002 | 82.000 | 0.005 | 87.100 | 0.004 | | |
| 61.700 | 0.036 | 66.800 | 0.021 | 71.900 | 0.012 | 77.000 | 0.002 | 82.100 | 0.005 | 87.200 | 0.004 | | |
| 61.800 | 0.035 | 66.900 | 0.020 | 72.000 | 0.012 | 77.100 | 0.002 | 82.200 | 0.005 | 87.300 | 0.004 | | |
| 61.900 | 0.034 | 67.000 | 0.019 | 72.100 | 0.012 | 77.200 | 0.002 | 82.300 | 0.005 | 87.400 | 0.004 | | |
| 62.000 | 0.034 | 67.100 | 0.018 | 72.200 | 0.011 | 77.300 | 0.002 | 82.400 | 0.005 | 87.500 | 0.004 | | |
| 62.100 | 0.033 | 67.200 | 0.018 | 72.300 | 0.011 | 77.400 | 0.002 | 82.500 | 0.005 | 87.600 | 0.004 | | |
| 62.200 | 0.033 | 67.300 | 0.017 | 72.400 | 0.011 | 77.500 | 0.002 | 82.600 | 0.005 | 87.700 | 0.004 | | |
| 62.300 | 0.033 | 67.400 | 0.017 | 72.500 | 0.011 | 77.600 | 0.002 | 82.700 | 0.005 | 87.800 | 0.004 | | |
| 62.400 | 0.033 | 67.500 | 0.016 | 72.600 | 0.011 | 77.700 | 0.002 | 82.800 | 0.005 | 87.900 | 0.004 | | |
| 62.500 | 0.033 | 67.600 | 0.015 | 72.700 | 0.011 | 77.800 | 0.002 | 82.900 | 0.005 | 88.000 | 0.004 | | |
| 62.600 | 0.034 | 67.700 | 0.015 | 72.800 | 0.010 | 77.900 | 0.002 | 83.000 | 0.005 | 88.100 | 0.004 | | |
| 62.700 | 0.034 | 67.800 | 0.015 | 72.900 | 0.010 | 78.000 | 0.003 | 83.100 | 0.005 | 88.200 | 0.004 | | |
| 62.800 | 0.034 | 67.900 | 0.014 | 73.000 | 0.010 | 78.100 | 0.003 | 83.200 | 0.005 | 88.300 | 0.004 | | |
| 62.900 | 0.035 | 68.000 | 0.014 | 73.100 | 0.010 | 78.200 | 0.003 | 83.300 | 0.005 | 88.400 | 0.004 | | |
| 63.000 | 0.035 | 68.100 | 0.013 | 73.200 | 0.010 | 78.300 | 0.003 | 83.400 | 0.005 | 88.500 | 0.004 | | |
| 63.100 | 0.035 | 68.200 | 0.013 | 73.300 | 0.009 | 78.400 | 0.003 | 83.500 | 0.005 | 88.600 | 0.004 | | |
| 63.200 | 0.035 | 68.300 | 0.013 | 73.400 | 0.009 | 78.500 | 0.003 | 83.600 | 0.005 | 88.700 | 0.004 | | |
| 63.300 | 0.036 | 68.400 | 0.012 | 73.500 | 0.009 | 78.600 | 0.003 | 83.700 | 0.005 | 88.800 | 0.004 | | |
| 63.400 | 0.036 | 68.500 | 0.012 | 73.600 | 0.009 | 78.700 | 0.003 | 83.800 | 0.005 | 88.900 | 0.004 | | |
| 63.500 | 0.036 | 68.600 | 0.012 | 73.700 | 0.009 | 78.800 | 0.003 | 83.900 | 0.005 | 89.000 | 0.004 | | |
| 63.600 | 0.036 | 68.700 | 0.012 | 73.800 | 0.008 | 78.900 | 0.003 | 84.000 | 0.005 | 89.100 | 0.004 | | |
| 63.700 | 0.036 | 68.800 | 0.012 | 73.900 | 0.008 | 79.000 | 0.003 | 84.100 | 0.005 | 89.200 | 0.004 | | |
| 63.800 | 0.036 | 68.900 | 0.012 | 74.000 | 0.008 | 79.100 | 0.003 | 84.200 | 0.005 | 89.300 | 0.004 | | |
| 63.900 | 0.036 | 69.000 | 0.012 | 74.100 | 0.008 | 79.200 | 0.003 | 84.300 | 0.005 | 89.400 | 0.004 | | |
| 64.000 | 0.036 | 69.100 | 0.012 | 74.200 | 0.007 | 79.300 | 0.004 | 84.400 | 0.005 | 89.500 | 0.004 | | |
| 64.100 | 0.036 | 69.200 | 0.012 | 74.300 | 0.007 | 79.400 | 0.004 | 84.500 | 0.005 | 89.600 | 0.004 | | |
| 64.200 | 0.036 | 69.300 | 0.012 | 74.400 | 0.007 | 79.500 | 0.004 | 84.600 | 0.005 | 89.700 | 0.004 | | |
| 64.300 | 0.036 | 69.400 | 0.012 | 74.500 | 0.007 | 79.600 | 0.004 | 84.700 | 0.005 | 89.800 | 0.004 | | |
| 64.400 | 0.036 | 69.500 | 0.012 | 74.600 | 0.006 | 79.700 | 0.004 | 84.800 | 0.005 | 89.900 | 0.003 | | |
| 64.500 | 0.035 | 69.600 | 0.012 | 74.700 | 0.006 | 79.800 | 0.004 | 84.900 | 0.004 | 90.000 | 0.003 | | |
| 64.600 | 0.035 | 69.700 | 0.012 | 74.800 | 0.006 | 79.900 | 0.004 | 85.000 | 0.004 | | | | |
| 64.700 | 0.035 | 69.800 | 0.012 | 74.900 | 0.006 | 80.000 | 0.004 | 85.100 | 0.004 | | | | |
| 64.800 | 0.034 | 69.900 | 0.012 | 75.000 | 0.005 | 80.100 | 0.004 | 85.200 | 0.004 | | | | |
| 64.900 | 0.034 | 70.000 | 0.012 | 75.100 | 0.005 | 80.200 | 0.004 | 85.300 | 0.004 | | | | |
| 65.000 | 0.033 | 70.100 | 0.012 | 75.200 | 0.005 | 80.300 | 0.004 | 85.400 | 0.004 | | | | |
| 65.100 | 0.033 | 70.200 | 0.012 | 75.300 | 0.005 | 80.400 | 0.004 | 85.500 | 0.004 | | | | |
| 65.200 | 0.032 | 70.300 | 0.012 | 75.400 | 0.005 | 80.500 | 0.004 | 85.600 | 0.004 | | | | |
| 65.300 | 0.031 | 70.400 | 0.012 | 75.500 | 0.004 | 80.600 | 0.004 | 85.700 | 0.004 | | | | |
| 65.400 | 0.031 | 70.500 | 0.012 | 75.600 | 0.004 | 80.700 | 0.004 | 85.800 | 0.004 | | | | |
| 65.500 | 0.030 | 70.600 | 0.012 | 75.700 | 0.004 | 80.800 | 0.004 | 85.900 | 0.004 | | | | |
| 65.600 | 0.029 | 70.700 | 0.012 | 75.800 | 0.004 | 80.900 | 0.004 | 86.000 | 0.004 | | | | |
| 65.700 | 0.029 | 70.800 | 0.012 | 75.900 | 0.004 | 81.000 | 0.004 | 86.100 | 0.004 | | | | |
| 65.800 | 0.028 | 70.900 | 0.012 | 76.000 | 0.003 | 81.100 | 0.005 | 86.200 | 0.004 | | | | |
| 65.900 | 0.027 | 71.000 | 0.012 | 76.100 | 0.003 | 81.200 | 0.005 | 86.300 | 0.004 | | | | |
| 66.000 | 0.027 | 71.100 | 0.012 | 76.200 | 0.003 | 81.300 | 0.005 | 86.400 | 0.004 | | | | |
| 66.100 | 0.026 | 71.200 | 0.012 | 76.300 | 0.003 | 81.400 | 0.005 | 86.500 | 0.004 | | | | |
| 66.200 | 0.025 | 71.300 | 0.012 | 76.400 | 0.003 | 81.500 | 0.005 | 86.600 | 0.004 | | | | |
| 66.300 | 0.024 | 71.400 | 0.012 | 76.500 | 0.003 | 81.600 | 0.005 | 86.700 | 0.004 | | | | |
| 66.400 | 0.024 | 71.500 | 0.012 | 76.600 | 0.002 | 81.700 | 0.005 | 86.800 | 0.004 | | | | |

TechWare, Inc.

Exhibit # 2

Channel Change Analysis KASY-DT Albuquerque, New Mexico January 13, 2001

KASY-DT Albuquerque, NM has been allotted channel 51 for DTV operation. The paired analog station operates on channel 50. It is desired to change the DTV allotment to channel 45 so that the stations are not on adjacent channels thereby allowing them to share the same antenna.

An analysis has been performed to determine the feasibility of the proposed channel change. The study assumed that KASY-DT would operate on channel 45 at 245 kW ERP omni-directional with the radiation center above mean sea level (RCAMSL) of 3301 m. The proposed site at 35-12-48 N and 106-27-00 W is 0.3 km from the allotted location. The analysis was performed using computer software designed to replicate the FCC analysis software. At the proposed parameters the study indicates that KASY-DT would fully meet the de minimis interference requirements and in fact would cause little or no new interference to any other DTV allotment or authorized station. The only increase in interference would be 0.02% to KLUZ NTSC channel 41 Albuquerque, NM.

Since the proposed facility would operate at a location 0.3 km from the allotted location, at an elevation 12 meters higher than allotted with a 6.9 dB power increase over the allotted 50 kW coverage of the city of license would not be an issue.

Report prepared by: William R. Meintel

Exhibit #3
KASY-DT Channel 45 Albuquerque, NM

Environmental Impact Statement

An evaluation of the proposed facility has been made and it has been determined that an environmental assessment is not required **except as noted in item #8** in that:

1. It does not propose the use of high intensity white lighting in a residential neighborhood.
2. Although surrounded by the Sandia Mountain Wilderness area the proposed site is a recognized and long used location for various transmitting facilities. It is designated on USGS topographical maps as the Sandia Crest Electronics Site. In addition, the proposed site is only 0.3 km from the current KASY-DT site that is also part of Sandia Crest Electronics Site
3. It does not pose a threat to the existence or habitat of endangered species.
4. It does not affect districts, sites, buildings, structures or objects significant in American history, architecture, archaeology, engineering or culture that are listed in the National Register of Historic Places or are eligible for listing.
5. It does not affect Indian religious sites.
6. It is not located in a floodplain.
7. It does not propose construction that involved significant changes in surface features (e.g., wetland fill, deforestation or water diversion).
8. The proposed location, the Sandia Crest Electronics Site, has numerous TV, DTV and FM transmitting facilities as well as several other types of transmitters located there in relatively close proximity, and RF exposure conditions are known to be high. This site is to be considered a controlled area, and the various FCC licensees are continuing to work together to develop access procedures to ensure that the FCC's exposure guidelines are not exceeded. The applicant station KASY-DT acknowledges its obligations to cooperate with other users of the site to maintain such compliance. Specifically, Hammett & Edison, Inc. Consulting Engineers, will be requested to evaluate the site when KASY-DT is ready to begin operation, in order to develop such modifications of the access procedures as may be necessary and appropriate.